

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  (PTO-1449)	ATTY. DOCKET NO. <b>066662-0092</b>	SERIAL NO. <b>09/923,870</b>
	APPLICANT <b>Palsson</b>	
	FILING DATE <b>August 6, 2001</b>	GROUP <b>1631</b>

U.S. PATENT DOCUMENTS						
EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
/RSN/	1.	US 5,273,038	12-28-1993	Beavin, et al.		
	2.	US 5,914,891	06-22-1999	<del>Arkin, et al.</del>	McAdams et al.	
	3.	US 5,930,154	07-27-1999	Thalhammer-Reyero, C.		
	4.	US 5,947,899	09-07-1999	<del>Scollan, et al.</del>	Winslow et al.	
	5.	US 5,980,096	11-09-1999	Thalhammer-Reyero		
	6.	US 2002/0012939	01-31-2002	Palsson, et al.		
	7.	US 2002/0051998	05-02-2002	<del>Schmidt, et al.</del>	Schmidt-Dannert et al.	
	8.	US 2003/0224363	12-04-2003	Park, et al.		
	9.	US 2004/0029149	02-12-2004	Palsson, et al.		
	10.	US 2004/0009466	01-15-2004	Maranas, et al.		
	11.	US 2004/0072723	12-04-2003	<del>Park, et al.</del>	Palsson et al.	
	12.	US 2006/0147899	07-06-2006	Famili, et al.		
	13.	US 2007/0111294	05-17-2007	Burgard, et al.		
FOREIGN PATENT DOCUMENTS						
EXAMINER'S INITIALS	CITE NO.	DOCUMENT NUMBER	DATE	COUNTRY	Pages, Columns, Lines Where Relevant Figures Appear	Translation Yes No
/RSN/	14.	WO 01/061115	08-08-2002	PCT		
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
/RSN/	15.	Akutsu, "Estimation Algorithm of Genetic Network," Mathmatical Science (Suri-Kagaku) <del>Science</del> 37(6)40-46 (1999). (Original and English translation submitted herewith). <b>Mathematical Science</b>				
	16.	Aristidou and Penttila, "Metabolic engineering applications to renewable resource utilization," <i>Curr. Opin. Biotechnol.</i> 11(2)187-198 (2000).				
	17.	Benjamini and Hochberg, "Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing," <i>J.R. Statist. Soc. B.</i> 57:289-300 (1995).				
	18.	Callis, "Regulation of Protein Degradation," <i>Plant Cell</i> 7:845-857 (1995).				
	19.	Chadha et al., "Hybrid process for ethanol production from rice straw," <i>Acta. Microbiol. Immunol. Hung.</i> 42(1):53-59 (1995).				
	20.	Chadha et al., "Simultaneous saccharification and fermentation of rice straw into ethanol," <i>Acta. Microbiol. Immunol. Hung.</i> 42(1):71-75 (1995).				
	21.	Christensen and Nielsen, "Metabolic network analysis. A powerful tool in metabolic engineering," <i>Adv. Biochem Engi Biotech.</i> 66:209-231 (2000).				
EXAMINER			DATE CONSIDERED			
SDO 176269-1.066662.0092						

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

\*This reference is not attached. Will be provided under separate cover.

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <b>(PTO-1449)</b>	ATTY. DOCKET NO. <b>066662-0092</b>	SERIAL NO. <b>09/923,870</b>
	APPLICANT <b>Palsson</b>	
	FILING DATE <b>August 6, 2001</b>	GROUP <b>1631</b>

/RSN/			
	22.	Clarke, "Stability of Complex Reaction Networks," <u>Adv. Chem. Physics</u> 43:1-125 (1980).	
	23.	Cover and Blaser, "Helicobacter pylori infection, a paradigm for chronic mucosal inflammation: pathogenesis and implications for eradication and prevention," <u>Adv. Intern. Med.</u> 41:85-117 (1996).	
	24.	Dafoe et al., "In Silico Knowledge Discovery Biomedical databases," Proceedings of the SPIE Fifth Workshop on Neural Networks, San Francisco, November 7-10, 1993.	
	25.	Dooley et al., "An all D-amino acid opioid peptide with central analgesic activity from a combinatorial library," <u>Science</u> 266(5193):2019-2022 (1994).	
	26.	Duarte et al., "Reconstruction and validation of Saccharomyces cerevisiae iND750, a fully compartmentalized genome-scale metabolic model," <u>Genome Res.</u> 14(7):1298-1309 (2004).	
	27.	Edwards and Palsson, "The Escherichia coli MG1655 in silico Metabolic Genotype: Its Definition, Characteristics, and Capabilities," <u>Proc. Natl. Acad. Sci. USA</u> 97(10):5528-5533 (2000).	
	28.	Edwards et al., "Characterizing Phenotypic Plasticity: A Phase Plane Analysis," <u>BMES/EMBS Conference, Proceedings of the First Joint Vol. 2</u> , p. 1217 (1999).	
	29.	Feist and Palsson, "The growing scope of applications of genome-scale metabolic reconstructions using Escherichia coli," <u>Nat. Biotech.</u> 26(6):659-667 (2008).	
	30.	Fleischmann, "Whole-genome random sequencing and assembly of Haemophilus influenzae Rd," <u>Science</u> 269(5223):496-512 (1995).	
	31.	Ge, et al., "Cloning and functional characterization of Helicobacter pylori fumarate reductase operon comprising three structural genes coding for subunits C, A and B," <u>Gene</u> 204(1-2):227-234 (1997).	
	32.	Kelly, "The physiology and metabolism of the human gastric pathogen Helicobacter pylori," <u>Adv. Microb. Physiol.</u> 40:137-189 (1998).	
	33.	Kremling, et al., "The organization of metabolic reaction networks. III. Application for diauxic growth on glucose and lactose," <u>Metab. Eng.</u> 3(4):362-379 (2001).	
	34.	Mahadevan and Schilling, "The effects of alternate optimal solutions in constraint-based genome-scale metabolic models," <u>Metab. Eng.</u> 5(4):264-276 (2003).	
	35.	Marshall and Warren, "Unidentified curved bacilli in the stomach of patients with gastritis and peptic ulceration," <u>Lancet</u> 1(8390):1311-1315 (1984).	
	36.	McAdams and Shapiro, "Circuit simulation of genetic networks," <u>Science</u> 269(5224):650-656 (1995).	
	37.	Mendz et al., "Fumarate reductase: a target for therapeutic intervention against Helicobacter pylori," <u>Arch. Biochem. Biophys.</u> 321(1):153-159 (1995).	
	38.	Mendz et al., "Glucose utilization and lactate production by Helicobacter pylori," <u>J. Gen. Microbiol.</u> 139(12):3023-3028 (1993).	
	39.	Mendz and Hazell, "Fumarate catabolism in Helicobacter pylori," <u>Biochem. Mol. Biol. Int.</u> 31(2):325-332 (1993).	
	40.	Mendz et al., "Salvage synthesis of purine nucleotides by Helicobacter pylori," <u>J. Appl. Bacteriol.</u> 77(6):674-681 (1994).	
	41.	Palsson, "What Lies Beyond Bioinformatics," <u>Nat. Biotech.</u> 15:3-4 (1997).	

EXAMINER SDO 176269-1.066662.0092	DATE CONSIDERED
--------------------------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

\*This reference is not attached. Will be provided under separate cover.

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <b>(PTO-1449)</b>	ATTY. DOCKET NO. <b>066662-0092</b>	SERIAL NO. <b>09/923,870</b>
	APPLICANT <b>Palsson</b>	
	FILING DATE <b>August 6, 2001</b>	GROUP <b>1631</b>

/RSN/	42.	Patel and West, "Degradation of the pyrimidine bases uracil and thymine by <i>Escherichia coli</i> B" <u>Microbios.</u> 49(199):107-113 (1987).	
	43.	Raclot et al., "Selective release of human adipocyte fatty acids according to molecular structure," <u>Biochem. J.</u> 324 (Pt3):911-915 (1997).	
	44.	Sauer et al., "Metabolic Capacity of <i>Bacillus Subtilis</i> for the Production of Purine Nucleosides, Riboflavin, and Folic Acid," <u>Biotechnol. Bioeng.</u> 59(2):227-238 (1998).	
	45.	Savinell and Palsson, "Network Analysis of Intermediary Metabolism using Linear Optimization. II. Interpretation of Hybridoma Cell Metabolism," <u>J. Theor. Biol.</u> 154:455-473 (1992).	
	46.	Savinell and Palsson, "Network Analysis of Intermediary Metabolism using Linear Optimization. I. Development of Mathematical Formalism," <u>J Theor Biol</u> 154:421-454 (1992).	
	47.	Schena, et al., "Quantitative monitoring of gene expression patterns with a complementary DNA microarray," <u>Science</u> 270(5235):467-470 (1995).	
	48.	Schilling and Palsson, "The Underlying Pathway Structure of Biochemical Reaction Networks," <u>Proc. Natl. Acad. Sci. USA</u> 95(8):4193-4198 (1998).	
	49.	Schilling, "On Systems Biology and the Pathway Analysis of Metabolic Networks," Department of Bioengineering, University of California, San Diego: La Jolla 198-241 (2000).	
	50.	Sedivy and Fraenkel, "Fructose biphosphatase of <i>Saccharomyces cerevisiae</i> . Cloning, disruption and regulation of the FBP1 structural gene," <u>J. Mol. Biol.</u> 186(2):307-319 (1985).	
	51.	Selkov, et al., "The metabolic pathway collection from EMP: the enzymes and metabolic pathways database," <u>Nucleic Acids Res.</u> 24(1):26-28 (1996).	
	52.	Sherlock, et al., "The physiology of L-methionine catabolism to the secondary metabolite ethylene by <i>Escherichia coli</i> ," <u>Curr. Opin. Immunol.</u> 12:201-205 (2000).	
	53.	Shipston and Bunch, "The physiology of L-methionine catabolism to the secondary metabolite ethylene by <i>Escherichia coli</i> ," <u>J. Gen. Microbiol.</u> 135(6), 1489-1497 (1989).	
	54.	Silve, et al., "The immunosuppressant SR 31747 blocks cell proliferation by inhibiting a steroid isomerase in <i>Saccharomyces cerevisiae</i> ," <u>Mol. Cell Biol.</u> 16(6):2719-2727 (1996).	
	55.	Tanaka and Zerez, "Red cell enzymopathies of the glycolytic pathway," <u>Semin. Hematol.</u> 27(2):165-185 (1990).	
	56.	Tandaitnik, et al., "Modeling of biological neurons by artificial neural networks," Nineteenth Convention of Electrical and Electronics Engineers in Israel, Jerusalem, Israel, New York, NY USA, pages 239-242 (1996).	
	57.	Taniguchi and Tanaka, "Clarification of interactions among microorganisms and development of co-culture system for production of useful substances," <u>Adv. Biochem. Eng. Biotechnol.</u> 90:35-62 (2004).	
	58.	Venter, et al., "Shotgun sequencing of the human genome," <u>Science</u> 280(5369):1540-1542 (1998).	

EXAMINER SDO 176269-1.066662.0092	DATE CONSIDERED
--------------------------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

\*This reference is not attached. Will be provided under separate cover.

<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <b>(PTO-1449)</b>	ATTY. DOCKET NO. <b>066662-0092</b>	SERIAL NO. <b>09/923,870</b>
	APPLICANT <b>Palsson</b>	
	FILING DATE <b>August 6, 2001</b>	GROUP <b>1631</b>

/RSN/	59.	Vo, et al., "Reconstruction and functional characterization of the human mitochondrial metabolic network abased on proteomic and biochemical data," <u>J. Biol. Chem.</u> 279(38):39532-39540 (2004).	
	60.	Waterston and Sulston, "The Human Genome Project: reaching the finish line," <u>Science</u> 282(5386):53-54 (1998).	
	61.	Wills and Melham, "Pyruvate carboxylase deficiency in yeast: a mutant affecting the interaction between the glyoxylate and Krebs cycles.," <u>Arch. Biochem. Biophys.</u> 236(2):782-791 (1985).	
	62.	Winzeler, et al., "Functional characterization of the <i>S. cerevisiae</i> genome by gene deletion and parallel analysis," <u>Science</u> 285(5429):901-906 (1999).	
	63.	Xie and Wang, "Material Balance Studies on Animal Cell Metabolism Using a Stoichiometrically Based Reaction Network," <u>Biotech. Bioeng.</u> 52:579-590 (1996).	
	64.	Xie and Wang, "Energy Metabolism and ATP Balance in Animal Cell Cultivation Using a Stoichiometrically Based Reaction Network," <u>Biotech. Bioeng.</u> 52:591-601 (1996).	
	65.	Zeng, et al., "Use of respiratory quotient as a control parameter for optimum oxygen supply and scale-up of 2,3-butanediol production under microaerobic conditions," <u>Biotechnol. Bioeng.</u> 44(9):1107-1114 (1994).	
	66.	Zigova, "Effect of RQ and pre-seed conditions on biomass and galactosyl transferase production during fed-batch culture of <i>S. cerevisiae</i> BT150," <u>J. Biotechnol.</u> 80(1):55-62 (2000).	
	67.	URL affymetrix.com/index.affx; Date Obtained: 09-18-2009. <b>Home page, 1 page</b>	
	68.	URL affymetrix.com/products/arrays/specific/ecoli antisense.affx.: Date Obtained: 09-18-2009. <b>Home page, 1 page</b>	
	69.	URL asap.ahabs.wisc.edu/annotation/php/logon.php, The ASAP website.; Date Obtained: 09-07-2009. <b>Home page, 1 page</b>	
/RSN/	70.	URL ca.expasy.org/sprot/, protein database SWISS—PROT: Date Obtained: 06/15/2009. <b>Home page, 2 pages</b>	
	71.	URL chem.qmw.ac.uk/iubmb/enzyme/, Enzyme Nomenclature database maintained by G.P. Moss of Queen Mary and Western College in the United Kingdom; Date Obtained: 09-18-2009.	
/RSN/	72.	URL dchip.org, dChip software; Date Obtained 06-15-2009.	
/RSN/	73.	URL Dictionary.com pgs 1-2 (2004), Matrix; Date Obtained 11-01-2004.	
	74.	URL ecocyc.pamio.com/ecocyc/ecocyc.html, EcoCyc, Date Obtained 09-18-2009.	
/RSN/	75.	URL enzobio.com/lifesci_index.htm, Enzo BioArray Terminal Labeling Kit protocol; Date Obtained 09-18-2009.	
/RSN/	76.	URL genetics.wisc.edu/, <i>E. coli</i> Genome Project at the University of Wisconsin; Date Obtained 09-18-2009. <b>Home page, 1 page total</b>	
/RSN/	77.	URL Genome.jp Website, KEGG Bacillus subtilis, 1-7; Date Obtained 06-01-2005. <b>Home page</b>	
/RSN/	78.	URL genome.tugraz.at/Software/Genesis/Description.html, "Genesis" software; Date Obtained: 09-18-2009. <b>Home page, 1 page total</b>	
	79.	URL igweb.integratedgenomics.com/MPW/, Metabolic pathways database (MPW), Date Obtained 09-18-2009.	

EXAMINER SDO 176269-1.066662.0092	DATE CONSIDERED
--------------------------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

\*This reference is not attached. Will be provided under separate cover.

<p>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</p> <p>(PTO-1449)</p>	<p>ATTY. DOCKET NO.</p> <p><b>066662-0092</b></p>	<p>SERIAL NO.</p> <p><b>09/923,870</b></p>
	<p>APPLICANT</p> <p><b>Palsson</b></p>	
	<p>FILING DATE</p> <p><b>August 6, 2001</b></p>	<p>GROUP</p> <p><b>1631</b></p>

[illegible]

EXAMINER	DATE CONSIDERED
SDO 176269-1.066662.0092 /Russell S. Neagin/	04/28/2010

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.  
Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

\*This reference is not attached. Will be provided under separate cover.